

Listing of the Claims

1. (Currently Amended) A drug administration support system comprising:
- storing means for storing blood filtering information, biological information and drug information;
- calculating means for calculating a total clearance of the ~~a~~ drug with due consideration paid to the renal function failure and blood filtering on the basis of the blood filtering information, biological information, and drug information; and
- displaying means for displaying the obtained total clearance.

2. (Currently Amended) ~~A~~ The drug administration support system as claimed in claim 1, wherein said calculating means calculates the total clearance of the drug by the following formula:

$$CL_t = k \times CL_{cr} + (1 - T/100) \times Q_w \times (1 - f/100) + CL_a$$

where CL_t (ml/min) represents a total clearance during the blood filtering, k and T are constants different for individual drugs, k represents a coefficient for converting from the creatinine clearance to the drug clearance, T represents a protein binding rate of the drug, Q_w (ml/min) is the set value in the blood filtering, CL_{cr} (ml/min) represents a renal creatinine clearance, f represents a filter clogging removal efficiency reduction index, and CL_a (ml/min) represents a clearance of absorbing the drug to the blood filter.

3. (Currently Amended) ~~A~~ The drug administration support system as claimed in claim 2, wherein the renal creatinine clearance is calculated from a serum creatinine concentration by the following formula:

$$CL_{cr} = [BW \times (140 - Y) / (72 \times Cr)] \times M$$

where BW(kg) represents body weight, Y(y.o.) represents an age, Cr(mg/dl) represents a serum creatinine concentration, and M(mg/dl) represents a coefficient (male:1, female:0.85).

4. (Currently Amended) ~~A~~The drug administration support system as claimed in any ~~one of claims 1 to 3~~, wherein the total clearance of the drug is the sum of the renal clearance of the drug and the blood filtering clearance of the drug.

5. (Currently Amended) ~~A~~The drug administration support system as claimed in any ~~one of claims 1 to 4~~, wherein said displaying means displays a guideline by a level bar as the indication of the renal creatinine clearance.

6. (Currently Amended) ~~A~~The drug administration support system as claimed in any ~~one of claims 1 to 5~~, wherein said drug is the a renal secretion drug.

7. (Currently Amended) A program operable in a computer, the program comprising the steps of:

extracting stored blood filtering information, biological information and drug information from a memory; and

calculating a total clearance of the a drug with due consideration paid to the renal function failure and blood filtering on the basis of the blood filtering information, biological information, and drug information.

8. (New) The program operable in a computer as claimed in claim 7, wherein said calculating step calculates the total clearance of the drug by the following formula:

$$CL_t = k \times CL_{cr} + (1 - T/100) \times Q_w \times (1 - f/100) + CL_a$$

where $CL_t(\text{ml/min})$ represents a total clearance during the blood filtering, k and T are constants different for individual drugs, k represents a coefficient for converting from the creatinine clearance to the drug clearance, T represents a protein binding rate of the drug, $Q_w(\text{ml/min})$ is the set value in the blood filtering, $CL_{cr}(\text{ml/min})$ represents a renal creatinine clearance, f represents a filter clogging removal efficiency reduction index, and $CL_a(\text{ml/min})$ represents a clearance of absorbing the drug to the blood filter.

9. (New) The program operable in a computer as claimed in claim 8, wherein the renal creatinine clearance is calculated from a serum creatinine concentration by the following formula:

$$CL_{cr} = [BW \times (140 - Y) / (72 \times Cr)] \times M$$

where $BW(\text{kg})$ represents body weight, $Y(\text{y.o.})$ represents an age, $Cr(\text{mg/dl})$ represents a serum creatinine concentration, and $M(\text{mg/dl})$ represents a coefficient (male:1, female:0.85).

10. (New) The program operable in a computer as claimed in claim 7, wherein the total clearance of the drug is the sum of the renal clearance of the drug and the blood filtering clearance of the drug.

11. (New) The program operable in a computer as claimed in claim 7, wherein said drug is a renal secretion drug.

12. (New) A method of determining a drug dose to be administered to a patient, said method comprising:

calculating a total clearance of a drug, wherein the total clearance of the drug is the sum of a renal clearance of the drug and a blood filtering clearance of the drug;
providing a dose calculation of the drug based on the total clearance of the drug.

13. (New) The method as claimed in claim 12, wherein the dose calculation is supplied to a drug delivery apparatus.

14. (New) The method as claimed in claim 12, wherein the dose calculation is displayed on a display apparatus.

15. (New) The method as claimed in claim 12 further comprising retrieving blood filtering information, biological information and drug information, wherein said retrieving blood filtering information, biological information and drug information is used in calculating the total clearance of the drug.

16. (New) The method as claimed in claim 12 further comprising hemofiltering the patient's blood.

17. (New) The method as claimed in claim 12, wherein the drug is a renal secretion drug.

18. (New) The method as claimed in claim 12, wherein said calculating of the total clearance of the drug is in accordance with the following formula:

$$CL_t = k \times CL_{cr} + (1 - T/100) \times Q_w \times (1 - f/100) + CL_a$$

where CL_t (ml/min) represents a total clearance during the blood filtering, k and T are constants different for individual drugs, k represents a coefficient for converting from the creatinine clearance to the drug clearance, T represents a protein binding rate of the drug, Q_w (ml/min) is the set value in the blood filtering, CL_{cr} (ml/min) represents a renal

creatinine clearance, f represents a filter clogging removal efficiency reduction index, and $CLa(\text{ml/min})$ represents a clearance of absorbing the drug to the blood filter.

19. (New) The method as claimed in claim 18, wherein the renal creatinine clearance is calculated from a serum creatinine concentration by the following formula:

$$CL_{Cr} = [BW \times (140 - Y) / (72 \times Cr)] \times M$$

where $BW(\text{kg})$ represents body weight, $Y(\text{y.o.})$ represents an age, $Cr(\text{mg/dl})$ represents a serum creatinine concentration, and $M(\text{mg/dl})$ represents a coefficient (male:1, female:0.85).